	LENGTH						TOTAL MULTI VEHICLE CROSS CENTERLINE	TOTAL INTERSECTION- RELATED MVCC		ANNUAL MULTI- VEHICLE CROSS CENTERLINE CRASH DENSITY	POTENTIAL	ESTIMATED		Status/ Program	
JURISDICTION	(miles)	DISTRICT	COUNTY	ROUTE	FROM	TO	CRASHES	CRASHES*	CRASHES*	(CRASHES/MI/YR)	REMEDIES		IMPEDIMENTS		ADDITIONAL DETAILS
SECONDARY	1.243	1	WEBSTER	QUAIL AVE	~0.05 MI NORTH OF NW RAMP CURV (US 20)	~0.2 MI SOUTH OF 220TH ST (Just south of the SE corner of Fort Dodge)	10	0	4	0.894	(1)	\$12,430.00	(2)		
SECONDARY	1.128	4	HARRISON	LOESS HILLS TRL	HARRISON/POTTAWATTAMIE CO LINE	~0.3 MI SOUTH OF KERMIT PL (Just south of Missouri Valley)	6	0	1	0.591	(1)	\$11,280.00	(2)		
PRIMARY	2.172	1	TAMA	US 30	~0.3 MI EAST OF F AVE AND ~0.3 MI EAST OF MI 198	P ~0.3 MI EAST OF H AVE AND ~0.45 MI WEST OF MP-201 (Just to the west of Tama)	10	2	3	0.512	(1)	\$21,720.00	(2)		
DDH ( ) DV	1.406	2	DI VII COLUMNI	TOWN 404	14.60	END OF ROAD (At intersection with Plymonth St. in				0.446	(1)	¢1406000	(2)		6
PRIMARY	1.496	3	PLYMOUTH	IOWA 404	IA 60	Le Mars) ~0.5 MI NORTH OF 430TH ST AND ~0.4 MI	6	2	0	0.446	(1)	\$14,960.00	(2)		Spot overlays and patches (2011), bridge deck overlay and guardrail (2012)
PRIMARY	2.554	3	SIOUX	US 75	450TH ST AND ~0.13 MI NORTH OF MP-133	NORTH OF MP-135 (between Sioux Center and Maurice)	6	0	0	0.261	(1)	\$25,540.00	(2)		
					DAVIS/WAPELLO CO LINE AND ~0.25 MI NORTH	~0.3 MI SOUTH OF RIVER RD AND ~0.1 MI H SOUTH OF MP-32 (Just south of the SE cormer of									
PRIMARY	5.137	5	WAPELLO	US 63	OF MP-27 ~0.2 MI NW OF INTERSECTION OF OSAGE	Ottumwa)	12	2	3	0.260	(1)	\$51,370.00	(2)	2011	4-lane PMT underway by consultant, CH2M Hill
DDIMADY	5.704		TOTINGON	III c	ST/TAFT AVE AND ~0.4 MI NW OF MP-257 (Just to	CEDAR/JOHNSON CO LINE RD AND ~0.3 MI SE OF MP-262	12	_		0.252	(1)	¢57.040.00			
PRIMARY	5.704	6	JOHNSON	US 6	the SE of Iowa City)	OF MP-262	13	5	3	0.253	(1)	\$57,040.00	(2)		
PRIMARY	7.656	4	HARRISON	US 30	IOWA/NEBRASKA BORDER @ MP-0	~0.6 MI WEST OF ITALY AVE AND ~0.4 MI WEST OF MP-8 (to the west of Missouri Valley)	16	1	7	0.232	(1)	\$76,560.00	(2)		
PRIMARY	3.463	5	DAVIS	US 63	FLORIS RD AND ~0.3 MI NORTH OF MP-23 (Just west of Floris)	WAPELLO/DAVIS CO LINE AND ~0.25 MI SOUTH OF MP-27	7	2	2	0.225	(1)	\$34,630.00	(2)	N/A	4-lane PMT underway by consultant, CH2M Hill
PRIMARY	4.983	6	JOHNSON	IOWA 1	BUCHMAYER BND @ MP-91 (Just NE of Iowa City)	~0.2 MI SOUTH OF 210TH ST @ MP-96 (Just south	10	2	3	0.223	(1)	\$49,830.00	(2)	2010	A project is under construction to add 6 ft. paved shoulders and right and left turn lanes at Rapids Creek Rd. Morse Rd. and Newport Rd. in addition to improving the slops of the bed and extending the pipes and upgrading the guardrails and other safety features.
						~0.8 MI SW OF DECORAH CORPORATE				0.440		<b>.</b>			Winneshiek US 52, MP 142-148, will be within the project limits of Winneshiek NHSX-052-5(36)—3H-96, a 3R project we are planning to develop for FY 2012. Cross-Centerline crashes are something we will need to
PRIMARY	6.114	2	WINNESHIEK	US 52	CO RD B16 @MP-142 (Just north of Calmar) 220TH TRL AND ~0.2 MI SOUTH OF MP-11 (East o	BOUNDARY AND ~0.1 MI NORTH OF MP-148 of BENTON/IOWA CO LINE AND ~0.1 MI NORTH OF	12	0	2	0.218	(1)	\$61,140.00	(2)	2012	look at in development of this project.  IDOT paved the shoulders about five years ago and a safety study is being
PRIMARY	4.192	6	IOWA	US 151	Marengo) FIR AVE AND ~0.1 MI WEST OF MP-21 (East of	MP-15 ~0.5 MI EAST OF US 75 AND ~0.2 MI EAST OF MP-	8	1	4	0.212	(1)	\$41,920.00	(2)	2005-2010	finalized.
PRIMARY	5.464	3	SIOUX	US 18	Rock Valley)	26 (West of Hull)	10	0	2	0.203	(1)	\$54,640.00	(2)		3R Asphalt Overlay and Widening (shoulder and rumble strips)
PRIMARY	3.879	6	CLINTON	US 67	OF MP-25	~0.1 MI SW OF 400TH AVE AND ~0.3 MI NE OF MP-29 (South of Camanche)	7	4	1	0.201	(1)	\$38,790.00	(2)		
PRIMARY	3.908	5	LOUISA	US 61	WAPELLO @ MP-69	~0.6 MI SOUTH OF 145TH ST @ MP-73 (Just south of Grandview)	7	0	0	0.199	(1)	\$39,080.00	(2)		
PRIMARY	8.529	2	CLAYTON	US 18	135TH ST. AND ~0.5 MI NW OF MP-293 (Just south of Monona)	IA 76 @ MP-0 (Just west of McGregor)	15	2	4	0.195	(1)		(2)	2006	was recently improved as part of a FY 2006 3R project, NHSN-018-9(83)—2R-22.
PRIMARY	4.967	4	DALLAS	IOWA 44	~0.2 MI EAST OF S AVE AND ~0.1 MI EAST OF MI 97 (Just east of Dallas center)	P-~0.7 MI WEST OF DALLAS/POLK CO LINE AND ~0.2 MI EAST OF MP-102	8	2	0	0.179	(1)	\$49,670.00	(2)		
PRIMARY	3.768	2.	CERRO GORDO	US 65	~0.2 MI NORTH OF 300TH ST @ MP-200 (North of Mason City)	CERRO GORDO/WORTH CO LINE AND ~0.2 MI SOUTH OF MP-204	6	1	1	0.177	(1)		(2)		was recently improved as part of HSIP-65-8(53)—2H-17, let and constructed in 2009.
PRIMARY	13.612		BENTON	US 30	BENTON/TAMA CO LINE @ MP-218	~0.2 MI WEST OF U.S. 218 AND ~0.2 MI WEST OF MP-232 (south of Vinton)	21	2		0.171	, ,	\$136,120.00	(2)	2009	US 30 is in the planning stage to widen to 4 lanes cross section.
PKIMAKT	13.012	0	BENTON	03 30			21	2	9	0.171	(1)	\$130,120.00	(2)		US 30 IS III the planning stage to widen to 4 lanes cross section.
PRIMARY	5.333	1	MARSHALL	US 30	FAIRMAN AVE AND ~0.2 MI EAST OF MP-174 (Just west of State center)	~0.3 MI EAST OF KNAPP AVE AND ~0.1 MI EAST OF MP-179 (Just west of Marshalltown)	8	0	3	0.167	(1)	\$53,330.00	(2)		
PRIMARY	4.064	3	IDA	US 20	~0.3 MI WEST OF ALPINE AVE @ MP-40 (East of Cushing)	~0.1 MI EAST OF EAGLE AVE @ MP-44 (West of Holstain)	6	0	1	0.164	(1)	\$40,640.00	(2)		US 20 Reconstruction after 2015
PRIMARY	8.214	5	WAPELLO	US 34	MONROE/WAPELLO CO LINE AND ~0.2 MI EAST OF MP-177	170TH AVE @ MP-185 (West of Ottumwa)	12	0	4	0.162	(1)	\$82,140.00	(2)		
					~0.7 MI NORTH OF 140TH ST AND ~0.35 MI	~0.4 MI NORTH OF 200TH ST AND ~0.3 NORTH						, , , , , , , ,			Part of project HSIPX-150-3(65)3L-10. Curve located 4.5 miles North of
PRIMARY PRIMARY	6.921 5.016	6	BUCHANAN WINNEBAGO	IOWA 150 IOWA 9	NORTH OF MP-43 (Just south of Hazleton) 190TH AVE @ MP-159 (East of Forest City)	OF MP-50 (Just north of Independence) WINNEBAGO/WORTH CO LINE @ MP-164	10	0	3	0.161 0.155	(1)	\$69,210.00	(2)	2011	Independence is Proposed to LET in Oct. 2011
		4			~0.2 MI SOUTH OF 182ND ST @ MP-105 (Just north	GRUNDY/MARSHALL CO LINE AND ~0.45 MI	12	1				#0 <i>C</i> 220 00		1	
PRIMARY	8.623	1	MARSHALL	IOWA 14	of Marshalltown)	SOUTH OF MP-114	12	0	4	0.155	(1)	\$86,230.00	(2)	1	
PRIMARY	4.338	3	SIOUX	US 75	~0.35 MI SOUTH OF 360TH ST AND ~0.45 MI SOUTH OF MP-142 (North of Sioux Center)	320TH ST AND ~0.9 MI NORTH OF MP-145 (West of Hull)	6	0	1	0.154	(1)	\$43,380.00	(2)		
PRIMARY	5.387	1	MARSHALL	IOWA 14	~0.3 MI NORTH OF 315TH ST AND ~0.1 MI SOUTH OF MP-92 (North of Laurel)	NORTH OF MP-97 (South of Marshalltown)	7	0	2	0.144	(1)	\$53,870.00	(2)		
PRIMARY	7.71	1	WEBSTER	US 169	~0.1 MI SOUTH OF 175TH ST AND ~0.5 MI NORTH OF MP-160 (Just north of the NW border of Fort Dodge)	WEBSTER/HUMBOLDT CO LINE AND ~.2 MI NORTH OF MP-168	10	0	6	0.144	(1)	\$77,100.00	(2)		
SECONDARY	4.705	5	MARION	HWY T15	OLD HWY 92 (East of Knoxville)	~0.04 MI SW OF RED ROCK RESERVOIR (South from the SW border of Pella)	6	1	1	0.142	(1)	\$47,050.00	(2)		

	LENGTH						TOTAL MULTI VEHICLE CROSS CENTERLINE	TOTAL	FATAL/MAJOR INJURY MVCC	ANNUAL MULTI- VEHICLE CROSS CENTERLINE CRASH DENSITY	POTENTIAL	ESTIMATED		Status/ Program	
JURISDICTION	(miles)	DISTRICT	COUNTY	ROUTE	FROM ~0.4 MI EAST OF HACKBERRY RD @ MP-9 (East	TO  ~0.15 MI WEST OF 400TH ST AND ~ 25 MI FAST	CRASHES	CRASHES*	CRASHES*	(CRASHES/MI/YR)	REMEDIES	COST	IMPEDIMENTS	Fiscal Year	ADDITIONAL DETAILS
PRIMARY	17.283	4	POTTAWATTAMIE	US 6	`	OF MP-26 (West of Oakland)	22	0	7	0.141	(1)	\$172,830.00	(2)		
DDDAADY	5 722		LINION	110.24		~0.2 MI NORTH OF 190TH ST AND ~0.2 MI SOUTH	7		,	0.126	(1)	\$57.220.00			
PRIMARY	5.732	4	UNION	US 34	~0.2 MI NORTH OF HWY G44 AND ~0.1 MI SOUTH	OF MP-82 (South from SW border of Creston) ~0.5 MI NORTH OF BRIGGS ST AND ~0.2 MI	7	0	4	0.136	(1)	\$57,320.00	(2)		
PRIMARY	9.885	5	MARION	IOWA 14		SOUTH OF MP-56 (South of Monroe)	12	0	2	0.135	(1)	\$98,850.00	(2)		
PRIMARY	9.232	5	DES MOINES	US 61	(North of Burlington)	of Mediapolis)	11	0	5	0.132	(1)	\$92,320.00	(2)	2009	Resurfaced last year with 4' paved shoulders with paved shoulder rumbles.
PRIMARY	5.282	6	JACKSON	IOWA 64	OF MP-26 (east of Baldwin)	~0.5 MI WEST OF 24TH ST @ MP-31 (East of Maquoketa)	6	0	1	0.126	(1)		(2)	2006	HMA widened and resurfaced in 2006.
PRIMARY	9.038	6	BUCHANAN	IOWA 150	BENTON-BUCHANAN CO LINE @ MP 29	~0.2 MI NORTH OF 252ND ST @ MP-38 (South of Independence)	10	0	3	0.123	(1)	\$90,380.00	(2)		
PRIMARY	5.531	5	LOUISA	IOWA 92		~1.0 MI WEST OF GRANDVIEW CORPORATE BOUNDARY AND ~0.2 MI EAST OF MP-259	6	1	2	0.121	(1)	\$55,310.00	(2)		
						MONROE/WAPELLO CO LINE AND ~0.2 MI WEST		_	_						
PRIMARY	6.63	5	MONROE	US 34	` '	OF MP-177 ~0.15 MI NORTH OF 127TH ST (South of Plesant	7	0	3	0.117	(1)	\$66,300.00	(2)		
SECONDARY	7.694	5	JEFFERSON	PLEASANT PLAIN RD	·	Plain)	8	1	2	0.116	(1)	\$76,940.00	(2)		
PRIMARY	5.978	2	WINNESHIEK	IOWA 9	SOUTH OF MP-264 (South of the SE Border of	ALLAMAKEE/WINNESHIEK CO LINE ~0.15 MI EAST OF MP-270	6	1	2	0.112	(1)		(2)		
TALLER INCI	51370	_	VVII VI VII VII VII VII VII VII VII VII	10 1117	,			-		0.112	(1)		(-)		
PRIMARY	6.048	3	CLAY	US 71		OF MP-195 (South of Greenville and Rossie)	6	0	1	0.110	(1)	\$60,480.00	(2)		
PRIMARY	10.088	5	MARION	IOWA 5	~0.2 MI SE OF SW RAMP CURVE IOWA 5/92 AND ~0.2 MI NW OF MP-60	~0.4 MI NW OF VAN BUREN DR @ MP-50 (North of Marysville)	10	3	1	0.110	(1)	\$100,880.00	(2)		
PRIMARY	6.325	4	UNION	IOWA 25		ADAIR/UNION CO LINE AND ~0.4 MI NORTH OF MP-45	6	0	3	0.105	(1)	\$63,250.00	(2)		
PRIMARY	11.614	1	TAMA		,	BENTON/TAMA CO LINE AND IOWA 21 @ MP-	11	1	2	0.105	(1)	\$116,140.00	(2)		
		1				US 69 AND ~0.1 MI WEST OF MP-161 (West of		1	3				` ,		
PRIMARY	6.826	2	HANCOCK	US 18		Garner)  DALLAS/MADISON CO LINE AND ~0.4 MI SOUTH	6	0	1	0.098	(1)	\$68,260.00	(2)		
PRIMARY	8.06	4	MADISON		SOUTH OF MP-73 (North of Winterset)	OF MP-81 ~0.25 MI SOUTH OF 133RD ST AND ~0.4 MI	7	0	1	0.096	(1)	\$80,600.00	(2)		
PRIMARY	9.291	5	WASHINGTON	IOWA 1		NORTH OF MP-66 (South of Kalona)	8	2	3	0.096	(1)	\$92,910.00	(2)		IDOT has added paved shoulders and replaced some shoulders in the flood
PRIMARY	7.234	6	IOWA	IOWA 220	•	U.S. 151/42ND AVE AND ~0.8 MI EAST OF MP-7	6	1	0	0.092	(1)	\$72,340.00	(2)		area in the last few years.
SECONDARY	8.452	6	BUCHANAN	BAXTER AVE	~1 MI NORTH OF JESUP CORPORATE BOUNDARY	~0.2 MI SOUTH OF 112TH ST (South of Fairbank)	7	0	1	0.092	(1)	\$84,520.00	(2)		
DDIMADY	7.38	5	WASHINGTON	IOWA 1		~1.3 MI SW OF WASHINGTON CORPORATE BOUNDARY @ MP-53			,	0.090	(1)	\$73,800.00			
PRIMARY	7.38	3	WASHINGTON	IOWA 1		~0.1 MI NORTH 260TH ST AND ~0.1 MI NW OF MP-	0	0	1	0.090	(1)	\$75,800.00	(2)		
PRIMARY	7.576	3	CRAWFORD	US 59		99 (North of Denison) MAIER AVE AND ~0.1 MI WEST OF MP-82 (South	6	2	2	0.088	(1)	\$75,760.00	(2)		
PRIMARY	11.902	6	JOHNSON	IOWA 1		of SW Border of Iowa City)	9	1	2	0.084	(1)	\$119,020.00	(2)		
PRIMARY	7.977	5	MAHASKA	US 63	Oskaloosa)	~1.0 MI SOUTH OF NEW SHARON CORPORATE BOUNDARY AND ~0.35 MI NORTH OF MP-74	6	1	3	0.084	(1)	\$79,770.00	(2)	2010	It was resurfaced during FY 2010 with 2' wide paved shoulders with paved shoulder rumbles.
PRIMARY	9.491	5	MUSCATINE	IOWA 22	· ·	~0.6 MI EAST OF SEVEN SPRINGS RD @ MP-68 (West of Muscatine)	7	0	2	0.082	(1)	\$94,910.00	(2)		
PRIMARY	8.695	3	SIOUX	US 18		~0.3 MI WEST OF DOVE AVE @ MP-17 (West of Rock Valley)	6	0	2	0.077	(1)	\$86,950.00	(2)		Being considered for 3R but outside current 3-year
PRIMARY	11.639	6	BENTON		US 30 @ MP-232 (Between Van Horne and Newhall)	~1.1 MI SOUTH OF VINTON CORPORATE	8	2	1	0.076	(1)	\$116,390.00	(2)		
DDIMADN	0.72	2	WOODDIEN	116 20	~ MI WEST OF JASPER AVE @MP-22 (East of	~1.0 MI WEST OF CORRECTIONVILLE CORPORATE BOUNDARY AND ~0.2 MI WEST OF MP-32		0	3	0.000	(1)	¢07.200.00	(2)		
PRIMARY	9.73		WOODBURY		~1.08 MI NE OF CITY OF DECORAH AND ~0.4 MI		0	U	3	0.069	(1)	\$97,300.00	(2)		This corridor was improved as part of FY 2002 3R project NHSX-52-
PRIMARY	12.075		WINNESHIEK	US 52	~0.7 MI EAST OF N AVE AND ~0.5 MI EAST OF	MINNESOTA STATE LINE JOHNSON COUNTY LINE AND ~0.2 MI EAST OF	7	0	2	0.064	(1)		(2)	2002	5(30)—3H-96.
PRIMARY	10.813	6	IOWA	US 6	•	MP-234	6	1	1	0.062	(1)	\$108,130.00	(2)		
PRIMARY	16.556	1	BOONE	IOWA 17		HAMILTON/BOONE CO LINE AND ~0.2 MI SOUTH OF MP-33	9	0	3	0.060	(1)	\$165,560.00	(2)		
PRIMARY	11.213	2	ALLAMAKEE	IOWA 9	~1.3 NE OF WAUKON CORPORATE BOUNDARY AND ~0.3 MI NORTH OF MP-281	~1.3 MI WEST OF LANSING CORPORATE BOUNDARY AND ~0.45 MI WEST OF MP-293	6	0	2	0.059	(1)		(2)	1992	This corridor was last resurfaced in 1992.

# Highest Multiple Vehicle Cross Centerline (MVCC) Crash Density Corridors Rural Primary Two-lane and Paved Secondary Roads

# 2001 to 2009

							TOTAL MULTI-	1		ANNUAL MULTI-					
							VEHICLE CROSS	TOTAL	EATAL MAJOR	VEHICLE CROSS CENTERLINE CRASH				Status/	
	LENGTH							RELATED MVCC				ESTIMATED		Program	
JURISDICTION	(miles)	DISTRICT	COUNTY	ROUTE	FROM	TO	CRASHES	CRASHES*	CRASHES*	(CRASHES/MI/YR)	REMEDIES	COST	IMPEDIMENTS	Fiscal Year	ADDITIONAL DETAILS
						~1.0 MI WEST OF GRUNDY CENTER									
					~0.4 MI SOUTH OF 320TH ST AND ~0.2 MI NORTH	CORPORATE BOUNDARY AND ~0.4 MI EAST OF									
PRIMARY	13.086	1	GRUNDY	IOWA 14	OF MP-115 (North of the NW Border of Conrad)	MP-128	7	0	3	0.059	(1)	\$130,860.00	(2)		
					~0.08 MI NW OF DUNDEE DR AND ~0.2 MI NW OF	ALLAMAKEE/CLAYTON CO LINE AND ~0.45 MI									
PRIMARY	19.63	2	ALLAMAKEE	IOWA 76	MP-27 (South of Waukon)	NORTH OF MP-7	8	0	2	0.045	(1)		(2)	1995	This corridor was last resurfaced in 1994-95.
					~0.25 MI NORTH OF HWY E43 AND ~0.4 MI	~0.8 MI EAST OF O AVE AND ~0.2 MI EAST OF									
PRIMARY	15.576	1	TAMA	US 63	NORTH OF MP-121 (North of Toledo)	MP-137 (West of Traer)	6	0	1	0.043	(1)	\$155,760.00	(2)		

Total Miles = 479.842

\* Included in TOTAL MULTI-VEHICLE CROSS CENTERLINE (MVCC) CRASHES.

# ROADWAYS INCLUDED

- 1. Rural, primary two-lane
- 2. Paved secondary
- 3. Must be at least one-mile away from an incorporated area boundary.

### QUALIFYING CONDITIONS

- 1. Multiple vehicle cross centerline crashes (MVCC).
- 2. More than 2.5 times statewide average MVCC crash density.
- 3. At least six MVCC crashes during analysis period.

# $STATEWIDE\ AVERAGE = \textbf{0.016}\ MVCC\ CRASHES/MILE/YEAR$

#### Footpotos

- (1) Installing Centerline Rumble Strips if >= 3000 ADT or on top 5% List and pavement is in good condition (Iowa DOT Design Policy).
- (2) Possible impediments are unknown until after a study is completed.